

**CLAIMS**

1        1. (previously presented) A portable device comprising:  
2            a microprocessor;  
3            a non-volatile memory coupled to the microprocessor; and  
4            a biometrics-based authentication module coupled to and controlled by the  
5            microprocessor, wherein access to the non-volatile memory is granted to a user provided that  
6            the biometrics-based authentication module authenticates the user's identity and wherein  
7            access to the non-volatile memory is denied to the user otherwise.

1        2. (previously presented) The portable device as recited in Claim 1 wherein the  
2            biometrics-based authentication module is a fingerprint authentication module.

1        3. (previously presented) The portable device as recited in Claim 1 further  
2            comprising a universal serial bus (USB) connector for coupling with another USB-compliant  
3            device.

1        4. (previously presented) The portable device as recited in Claim 1 wherein the  
2            biometrics-based authentication module comprises a biometrics sensor fitted on one surface  
3            of the portable device.

1        5. (previously presented) The portable device as recited in Claim 1 wherein the  
2            non-volatile memory comprises flash memory.

1        6. (previously presented) The portable device as recited in Claim 1 wherein the  
2            microprocessor is configured to provide a bypass mechanism for authentication upon a  
3            determination of authentication failure by the biometrics-based authentication module.

1        7. (currently amended) A portable device comprising:

2 a bus;

3 a microprocessor coupled to the bus;

4 a non-volatile memory coupled to the bus; and

5 a biometrics-based authentication module coupled to the bus, wherein under

6 the control of the microprocessor the biometrics-based authentication module is configured to

7 (1) capture a first biometrics marker; (2) store the first biometrics marker in the non-volatile

8 memory; (3) capture a second biometrics marker; and (4) determine whether the second

9 biometrics marker can be authenticated against the first biometrics marker; and wherein the

10 microprocessor is configured to disable access to the non-volatile memory upon a

11 determination of authentication failure by the biometrics-based authentication module.

1 8. (previously presented) The portable device as recited in Claim 7 wherein the  
2 biometrics-based authentication module is a fingerprint authentication module.

1           9. (previously presented) The portable device as recited in Claim 7 further  
2 comprising a universal serial bus (USB) device controller coupled to the bus and a USB  
3 connector coupled to the bus, such that the portable device is capable of communicating with  
4 a host platform via the USB connector.

1           10. (previously presented) The portable device as recited in Claim 7 wherein the  
2       biometrics-based authentication module is structurally integrated with the portable device in a  
3       unitary construction and comprises a biometrics sensor being disposed on one surface of the  
4       portable device.

1 11. (previously presented) The portable device as recited in Claim 7 wherein the  
2 non-volatile memory comprises flash memory.

1           12. (previously presented) The portable device as recited in Claim 7 wherein the  
2   biometrics-based authentication module is further configured to encrypt the first biometrics  
3   marker before storing the first biometrics marker in the non-volatile memory.

1           13. (previously presented) The portable device as recited in Claim 7 wherein the  
2   microprocessor is configured to direct the biometrics-based authentication module to capture  
3   and store the first biometrics marker provided that no biometrics marker has been stored in  
4   the non-volatile memory.

1           14. (previously presented) The portable device as recited in Claim 7 wherein the  
2   microprocessor is configured to enable access to the non-volatile memory upon a  
3   determination of authentication success by the biometrics-based authentication module.

1           15. (canceled)

1           16. (previously presented) The portable device as recited in Claim 7 wherein the  
2   microprocessor is configured to provide a bypass mechanism for authentication upon a  
3   determination of authentication failure by the biometrics-based authentication module.

1           17. (currently amended) A biometrics-based authentication method implemented  
2   using a portable device, the method comprising the steps of:

3           (a) obtaining a first biometrics marker from a user with a biometrics sensor  
4   installed on the portable device;

5           (b) retrieving a registered biometrics marker from a non-volatile memory of the  
6   portable device, the registered biometrics marker having been stored therein during a  
7   registration process;

8           (c) comparing the first biometrics marker against the registered biometrics  
9   marker; and

10                   (d) denying the user access to the non-volatile memory provided that a match is  
11 not identified in said step (c); and

12                   (e) signaling an authentication success provided that a match is identified in said  
13 step (c).

1                   18. (previously presented) The biometrics-based authentication method as recited  
2 in Claim 17 wherein the registered biometrics marker is a fingerprint.

1                   19. (previously presented) The biometrics-based authentication method as recited  
2 in Claim 17 wherein the registered biometrics marker is stored in an encrypted format.

1                   20. (previously presented) The biometrics-based authentication method as recited  
2 in Claim 17 wherein said step (d) comprises granting the user access to the non-volatile  
3 memory.

1                   21. (canceled)

1                   22. (previously presented) The biometrics-based authentication method as recited  
2 in Claim 17 further comprising the step of providing the user with a bypass authentication  
3 procedure provided that a match is not identified in said step (c).

1                   23. (new) A unitary portable data storage device having biometrics capability  
2 which can be directly plugged into a universal serial bus (USB) socket of a host computer,  
3 the device comprising:

4                   a housing;  
5                   a fingerprint module, at least a portion of which is housed within the housing, the  
6 fingerprint module including a sensor disposed on an exterior surface of the housing;

7           a memory including non-volatile memory, the memory housed within the housing and  
8   coupled to the fingerprint module and is configured to store at least one fingerprint template  
9   as well as user data;

10           a memory controller housed within the housing and coupled to the memory, the  
11   memory controller controlling access to the memory;

12           a USB plug integrated into the housing without an intervening cable and capable of  
13   coupling the unitary portable data storage device directly to a USB socket on a host  
14   computer; and

15           a USB device controller housed within the housing, the USB device controller  
16   enabling the unitary portable data storage device to communicate with the host computer via  
17   the USB protocol;

18           wherein the fingerprint module is configured to (1) receive a fingerprint sample from  
19   a user placing a finger on the sensor; (2) compare the fingerprint sample with said at least one  
20   fingerprint template; and (3) reject a request from the user to access the user data stored in the  
21   memory provided that the comparison in said step (2) results in no match.

1           24. (new) The unitary portable data storage device as recited in Claim 23 wherein  
2   at least a portion of the USB plug protrudes from the housing to facilitate direct coupling of  
3   the unitary portable data storage device to the USB socket of a computer.